

REMARKS

Receipt of the Office Action of September 25, 2007, is gratefully acknowledged, as is the subsequently issued Interview Summary which clarifies the Office Action.

In the Office Action, claims 9 - 15 are identified as having been considered. They are rejected as follows: **(1)** claims 10 and 11 are rejected under 35 USC 112, first paragraph because in claim 10 "...there is no support for two elements in 'parallel'where one of the those [sic] two elements is connected to the same 'drain pipe'with a third unit....," and because in claim 11 "....there is no support for two elements in 'series'where one of those two elements is connected to the same 'drain pipe' with a third unit...." In the Interview Summary, the examiner states that claims 12 and 13 are also rejected under 35 USC 112, first paragraph. The reason for the rejection of claim 12 is given in the Office Action. The examiner states with respect to claim 12 that "...there is no support for two elements that are connected to the same 'drain pipe'with one of those units connected to a 'device from [sic] measuring a quantity'" And with respect to claim 13, the examiner connects it to claim 12 and states "(i.e. 'weight tank' of claim 13)"; **(2)** claim 15 is rejected as indefinite under 35 USC 112, second paragraph as "...not consistent with the originally filed disclosure;" **(3)** claim 14 is included in the rejection under 35 USC 112, second paragraph; **(4)** claims 9 and 14 are rejected under 35 USC 102(b) by Adney et al, or in the alternative under 35 USC 103(a) over Adney et al; and **(5)** claim 15 is rejected under 35 USC 102(b) by Adney et al. In the Interview Summary the examiner confirms that "Claims 9, 14 and 14 [sic] [15] are rejected over prior art."

Regarding **(1)**, claims 10 and 11 have been canceled and their subject matter inserted in claim 9 as amended which states that the "calibration reference

flow meter [is] installed in one of: parallel or series arrangement to said at least one flow meter." Support for the "parallel or series arrangement" can be seen from Fig. 1 which shows that the calibration reference flow meter 21 is arranged either in parallel or in series with 5/7. Claim 12 has been amended to delete the reference to "the flow meter calibration cart," and claim 13 is dependent from amended claim 12 that no longer recites the calibration cart.

Regarding **(2) and (3)**, claim 15 has been amended to insure consistency with the originally filed disclosure. Claim 14 has been amended to remove the reference to the cart.

Regarding **(4) and (5)**, it is noted that none of the newly amended claims are anticipated or rendered obvious by Adney et. al.

Adney describes two flow meters connected in series. The first flow meter is the intermittently operating flow meter comprising the reference container, the second is the meter FT. Neither of these flow meters is a calibrated reference flow meter. Both of them need to be calibrated.

In addition, the first flow meter is not a regular flow meter for continuous flow measurement. It is operated by filling liquid into the reference container and sending it out again. The quantity of liquid sent out of the reference container is measured. This quantity is used to provide a correction factor for the second flow meter. It cannot be used to measure a continuous flow. For continuous flow measurement several of these devices are necessary (see column 9, lines 20 - 25 of Adney).

Adney uses distilled water only because he had it readily available (see column 11, lines 34 ff). Adney is not concerned about contamination of the

devices to be calibrated. This can be seen e.g. from the fact, that Adney uses a gas (air or inert gases such as nitrogen) to provide a head pressure in the reference container. This gas is allowed to enter the liquid and the flow meters.

The drain described by Adney (see figure 1) is connected to the distilled water supply at the beginning of the flow line upstream of the flow meters. Obviously, the distilled water flows from container 1 down the flow line through the first and the second flow meter. There is no drain provided downstream of the flow meters.

The object of the present invention is to provide a calibration rig, which ensures that the flow meters are never contaminated during the calibration or re-calibration on the rig. This problem is solved by our calibration rig by ensuring, that only fresh pure sterilized water is sent through the meters to be calibrated. No potential source of contamination is located up-stream of a flow meter to be calibrated. All the water that has been in contact with a flow meter to be calibrated is disposed of. It is never re-used on the rig or sent through another flow meter to be calibrated.

If a contaminated flow meter is calibrated on the rig, contaminations may dissolve in the water sent through the flow meter during calibration. This contaminated water may contaminate any part of the rig downstream of the flow meter to be calibrated. According to the present invention, this potentially contaminated water is disposed of. Thus it cannot contaminate any part of the rig upstream of the place for the flow meter to be calibrated.

Consequently, the next flow meter to be calibrated in this place on the rig is never exposed to any of these contaminations. It is always fed with fresh pure sterilized water. Also all parts of the rig, which may have come in contact with potentially contaminated water, are located down stream of the new flow meter to

be calibrated. Thus, these contaminants never come in contact with the flow meter to be calibrated.

Regarding the amended claims, claim 9 features a rig, wherein a calibrated reference flow meter is connected in series or in parallel to the flow meter to be calibrated. The pure sterilized water is sent from the source through the flow meter, then through the calibrated reference flow meter and from there to the drain.

None of the flow meters described by Adney is a calibrated reference flow meter.

The drain described by Adney is located up-stream of the two flow meters described by Adney. Installation of a contaminated flow meter on the rig described by Adney would most likely permanently contaminate the entire rig.

If the contaminated flow meter would be removed after calibration and the water remaining on the rig would be sent down the drain, the pipes connecting the two flow meters with the drain would all be contaminated. The next flow meter that would be installed on the rig would consequently be calibrated with distilled water from the source, which needs to be sent through these contaminated pipes before it flows through the flow meter to be calibrated.

Claim 15 relates to a method for calibration which is to be performed on a calibration rig comprising a calibrated reference flow meter. Adney does not describe using a calibrated reference flow meter for calibration. According to the present invention as claimed in claim 15, water is sent through the flow meter and through the calibrated reference flow meter and all the water sent through the flow is sent down the drain.

In view of the foregoing, re-examination and reconsideration are respectfully

requested and claims 9, and 12 - 15 found allowable.

Respectfully submitted
BACON & THOMAS, PLLC

Date: November 30, 2007

A handwritten signature in black ink, appearing to read 'Felix J. D'Ambrosio', written over the printed name.

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